NK
6200
W5x
CHM

L-7A

Leather Work

BY

Winifred Wilson

Published by

M. B. Willcox

180 William Street

New York

3.

Copyright 1908
M. B. Willcox
New York

CONTENTS.

	PAGE
Foreword - - - - -	5
Kinds of Leather and Their Treatment - -	7
Design - - - - -	8
Tracing and Design - - - - -	10
Pyrography - - - - -	11
Carving and Incising - - - - -	12
Engraving - - - - -	14
Modeling and Embossing - - - - -	16
Stamping and Tooling - - - - -	19
Cut Work - - - - -	21
Applique - - - - -	22
Inlay or Mosaic - - - - -	24
Coloring and Gilding - - - - -	25
Illustrations - - - - -	27
Patterns - - - - -	28

NK
6200
W5x
CHM

~~M
748.1
W754L~~

34641

All Leather mentioned in this
book, may be obtained from
M. B. WILLCOX
180 William St., New York

Transferred from Stearns
to Museum Library
5/10/57

FOREWORD

LEATHER has since primitive times contributed so generally to the needs of man that to tell all the phases of its history would be to retrace the slow, laborious steps by which it rose from purely utilitarian uses to its high position as an art medium in medieval times, and to its general adaptation to decorative purposes in the present. Such a study would be most interesting to the general art student as well as the craftsman, and would well repay the time given it, but the scope of this book does not admit of more than a brief summary of the progress of leather before passing to the description of the work itself.

At first we find the unshorn skins of animals forming a large part in the clothing of man, in his carpets and hangings. Different kinds were often sewn together, sometimes irregularly and sometimes to form a pattern. The next step was the removal of the hair and decoration by burning with hot stones and sand. A little later, colors and metal ornaments and fanciful lacing in the method of joining were added. From this the art of leather-work grew steadily. Those wonderful people, the Egyptians, applied it to the straps binding mummies, to their sandals, low cases, shields, and chariot furnishings, while the historic Boadicea is said to have possessed and worn a mantle whose seams were covered with embroidery. Early Grecian shields were made of cowhide and covered with metal, and the knights of medieval times carried those with leather-emblazoned covers.

The Venetians came to be celebrated for their leather wall hangings, rich in gilt, color and stamping. Chests for ecclesiastical vestments, marriage chests, and panels, show the addition

of iron bands and silver or copper-headed nails. It is recorded that even the shoes of the Venetian women were patterned to show caste.

Flanders, Spain, Portugal and England all produced work similar to that of Italy, and to the list of its uses added hangings for beds, bedspreads and coverings for chairs.

But while the art of leather work had been making such strides, the growing needs of civilization were encouraging a dangerous rival in tapestries. In the reign of Louis XIV Gobelin and other French tapestries succeeded in largely displacing leather until that necessity which permits nothing useful to art to be lost revived it, and in the great arts and crafts enthusiasm which is now sweeping the country leather-work has a large following.

The craftsman in leather must add to his acquaintance and appreciation of the art in leather-work an exact knowledge of the working properties of different kinds of leather. He must understand the principles of design and know how to apply them. He must be skilled in the processes and use of tools necessary to develop his designs. He must know the conditions under which the same kinds of leather are amenable to different processes.

As this volume is intended for the worker, we shall take up in turn those subjects which will be of practical use to him.

KINDS OF LEATHER AND THEIR TREATMENT

Good leather is the first requirement of leather work. It may be sheep, cow, calf or pig skin, Morocco, Russia, horse, chamois or vellum, according to the object into which it is to be made and the method of decoration, but the leather should be the best of its kind. Inferior leathers finished in imitation of the better class leathers are not to be depended upon for working quality or for durability. The latter fact is dwelt upon in the reports made by certain committees whose privilege it is to inspect the leather book bindings in various libraries, museums and private collections. These men find that the leathers which have received the simplest processes in the tanning have best withstood the ravages of time, while the imitation leathers are in worse condition than any others. In this report Morocco is pronounced the most durable leather.

There are various methods of decorating leather, such as burning, incising, modeling, embossing, stamping, cut-work, inlay, staining and gilding. Different leathers are suited to these methods of decoration. Ooze calf, sheep, goat and horse skins are adapted to burning. They are too malleable to model well and too thin to carve, but they may be stained or used in cut-work with very artistic effect. Cowhide with either grain or ooze surface, split cow, Russia calf and buff calf are most successfully developed with incising, carving, modeling or stamping. Pigskin is generally made up without ornament, depending upon the elegance of the design for its attraction. Morocco responds best to gilding as done by bookbinders.

DESIGN.

As the terms "design" and "ornament" are often used synonymously it may be interesting to define their technical application. The term "design" is a general one, and applies to the plan and construction of the object; "ornament," to the decorative ornamentation added to beautify or embellish the design. The design determines the character of the ornament, and that ornament is most successful which is wholly dependent upon the design.

In all branches of craft work we see many instances of failure to observe this balance, but in none does this defect produce more incongruous results than in leather-work. Tobacco pouches and men's wallets profusely decorated with naturalistic flowers, den pillows with Watteau landscapes, and belts with Teddy bears are some of the inconsistencies resulting from the desire for novelty and ignorance of the true relation of design and ornament.

In designing a leather object the first question to be considered is the use to which that object is to be put; the second, the form best suited to that use; the third, the limitations of the material.

Suppose a woman's handbag is the problem under discussion. Is the bag to do general service for the general woman or is it intended to complete the costume of an individual? If the former, it must be large and roomy to meet successfully the varied demands which will be made upon it. It must be built of leather which will harmonize with the fabric ordinarily chosen for street wear, wear well and not soil easily. It must have a catch at once secure and easily manipulated. If, on the other hand, a costume bag is being planned, the style and material of the gown will govern the design and choice of leather for the bag. A strictly tailored gown will demand a severe design and smooth surface leather like Russia calf or pigskin, while semi-dress seeks to hide the useful qualities of its accessories under graceful curves and ooze finished leathers. In making a costume bag the wearer must be thought of. A tall, statuesque woman must not be made to appear ridiculous by dangling what looks like a child's purse, or her petite sister to stagger under the weight of a miniature portmanteau.

Having decided upon the design and leather the next step is the ornament. This may be naturalistic, conventional or geometric, according to the style of design and kind of leather. Returning to the handbags for illustration, the general utility

1 Russia calfskin table cover

2 Handbag of Russia calfskin

3 Belt and bag of modeled calfskin

4 Costume bags

5 Table scarf

6 Goatskin workbag

8 Russia calfskin workbag

7 Calfskin medicine case

10 Carved Cowhide umbrella stand

9 Calfskin card case; incised and stamped

13 Mirror frame

12 Modeled and embossed calfskin book cover

11 Portfolio of tan Russia

14 Address book

15 Memorandum pad

16 Waste basket

23 Goat skin belt

21 Stamped calf skin belt

20 Stamped calf skin fob

17 Belt of sumach calf skin

19 Russia calfskin bill fold

18 Handbag

22 Gray horse hide head rest

24 Linen belt and bag

25 Portieres of arras or monk's cloth

26 Hatrack showing applique of carved cowhide on wood

27 Chair seat and back of carved, gilded and stamped cowhide

28 Calfskin screen modeled and stained

bag built on simple lines and of smooth surface leather will be most consistently decorated with a conventional or geometric pattern done in carving, modeling or stamping, while the dressier bag invites naturalistic or modified conventional treatment developed with cut-work, pyrography, staining or a combination of these processes.

For those who are especially interested in learning designing there are excellent schools and text-books for their instruction, but the skill necessary for successful work is based upon a fine sense of proportion and the ability to draw, and can be acquired only after much study and practice. There are many craftsmen skilled in the mechanical processes of leather-work who are hampered by their inability to design, and yet have not the time for study that they may overcome their difficulty. It is with the aim of assisting these that we have appended a few pages of designs applicable to a variety of objects suitably made of leather.

TRACING THE DESIGN.

As the tracing of the design is a preliminary to all leather-work, let us consider it before taking up the different processes used in decoration.

The design should be drawn upon some fairly tough paper, such as thick manila or bond, or architect's linen. If it is to be transferred to leather with an ooze finish, such as sheepskin, goatskin, kid or ooze calf, the leather should be spread upon a hard surface, such as a table top or drafting board, and the pattern tacked upon it with pins driven in vertically close to its upper edge or in the lines of the ornament. Placed in this manner the pinholes will not show in the completed article, having been either cut away or obliterated in the working. The lower edge of the pattern should be left free, so that it may be lifted to watch the progress of the tracing.

An agate stylus, a hard pencil, or a sharpened orange-wood stick may be used for tracing. The stylus should be held like a pencil for drawing and made to trace with considerable pressure all the lines of the design. Retracing should be avoided, as it produces a double line difficult to eradicate in the working. Where a long curved line is to be traced the stylus should be drawn over its whole length without stopping, as frequent pauses will give a jerky appearance and destroy the beauty of the full sweep. Straight lines may be traced accurately with the aid of a square or a metal-edged rule.

Smooth-finished leathers, such as Russia calfskin and cow-hide, must be dampened before they will receive the imprint of the design. The leather is placed flesh side down upon a marble slab and its surface gone over with a damp sponge, soft cloth or cotton wad. The wetting at one time of the whole surface is imperative if water rings are to be avoided. Afterward, either for tracing or work, parts of the leather may be redampened without danger of these defacing marks. The leather should not be made so wet that the moisture penetrates to the under side or that pressure from the stylus brings it back to the surface.

After the leather has been dampened the design is secured upon it and traced as described for soft finish leather.

PYROGRAPHY.

Etching with hot tools was one of the earliest methods of decorating leather. It is safe to say that fire-etching, or pyrography, as it is now called, would never have reached its present popularity—and, in many instances, abuse—if the laborious process of heating tools in a bed of coals were still necessary for its execution. But a fairly good pyrographic outfit, consisting of a platinum point set in a cork handle, rubber tube, bellows and bottle for benzine with an alcohol lamp for lighting, may be bought at any department store or artists' supply shop for a small sum, and the art of manipulating it is easily acquired.

At first, care is necessary to sustain an even line and to avoid burning holes in the leather, but practice will teach the right hand to draw with the red hot point as fearlessly as with a pencil, while the left will come to regulate the bellows automatically.

A variety of platinum points is to be had, some curved, some straight, some coarse, others fine, but one point dexterously handled will produce nearly the same result as several different points. Where economy of time is an item the frequent changing of points becomes a nuisance.

The character of a line drawn with a pyrographic point is determined by the inclination of the handle. By inclining the handle slightly to the right and tracing lightly with the tip of the point, fine lines are produced; by inclining it so that the rounded part of the point comes in contact with the leather, a broad dark line is burnt, and dots and shading, often used for backgrounds, are made by touching lightly or rubbing the leather with the point brought to a high degree of heat.

A complete mastery of the resources of the hot point will be found of incalculable value to the student of pyrography, enabling him to produce effects as subtle and convincing as the fine work of pen and ink etchers and raising his work far above the charge of mediocrity.

The leathers best suited to this method of decoration are ooze calf, sheep, goat, horse, ooze finished cowskin and kid calf. French kid and the thinner grades of chamois will curl with the application of heat.

CARVING AND INCISING.

Carving is the art of cutting through the surface of leather with sharp knives. Incising is a general term applied to shallow carving or to the preliminary process used in engraving and modeling.

The success of carving depends upon the ability to cut to just the right depth; a too shallow incision is ineffective, while one too deep weakens the leather. The danger is in cutting clear through, thus spoiling a whole piece of work.

Because of its difficulties of execution we do not see much wholly-carved leather, workers striving for similar effects by less hazardous methods or else using carving incidentally and in combination with modeling, staining and stamping.

Several knives with different shaped blades are generally included in the equipment for carving, although some craftsmen can so manipulate their leather with the left hand while cutting with the right that one knife does all the work. This requires no small amount of mechanical skill, and the ordinary worker will find at least two knives, one with a slanted and the other with a curved blade, none too many for his requirements. (Figure 1.) If he add to his list of tools a few gravers and gouges such as are used in carving metal and wood he will be able to give great diversity to his work.

Figure 1. Carving Knives

Leather is prepared for carving in one of three ways. The method in use in the seventeenth century was to boil the leather gently for an hour, allow it to cool and partially dry, and carve it while still damp; later, soaking for three or four minutes in hot water was thought to loosen the fibers sufficiently, while the modern way is to merely dampen the leather thoroughly with a wet sponge or cloth.

After the design has been transferred in the usual manner the leather is again dampened and smoothed flat upon the marble slab. Then an incising knife, held firmly with the forefinger of the right hand well down upon the blade, the third

and fourth fingers resting upon the leather and guided by the first finger of the left hand, has its point inserted in one of the lines of the design and forced along this line, cutting as it goes. Always the knife should stop just short of the meeting of two lines, as two incised lines running into each other will leave a corner of leather which is apt to roughen or curl back with wear and present a ragged appearance.

A vertical incision is made by forcing the blade into the leather at a right angle to its surface, and is the incision always used save when it is desired to turn the edge of the leather to imitate the lip of a shell, a leaf or the petal of a flower. In the latter case it becomes necessary to make a slanting incision to secure the extra amount of leather needed. Raised work of this kind is very effective when new, but it is not durable.

No exact rule can be given for the depth of an incision, although for ordinary carving from a quarter to a third of the thickness of the leather is not too deep to affect its strength. When incising is the preliminary operation to heavy modeling it should be deep enough to separate the design well from the background and to make high relief possible.

ENGRAVING.

Engraving is a modification of incising. It requires, in addition to the knives used for incising, a steel tool called an opener (Figure 2). An opener is made of quarter-inch tool bar

Figure 2. Openers

and measures about six or six and one-half inches. It is left broad in the center, to give a good grasp for the hand, and shaped to a dull point at one end and to a still duller point at the other. If much work is to be done a number of openers of varying sizes for engraving lines of different widths will be found necessary, and while they may be bought in the shops it is often more satisfactory as well as economical to make the tools as the need for them presents itself. This is quite practical with a supply of tool bar, files and emery cloth.

Having dampened the leather, traced and incised the design, the end of the opener is inserted in the incision and pushed along its entire length (Figure 4). The tool is held firmly in

Figure 4. Opening

the right hand in an almost vertical position, and the left hand is again used to steady and guide the right. By using pressure and going over a line several times the leather will grow dark and shiny, thus clearly defining the outline of a flat decoration. If the background is to be modeled to throw the ornament into relief, the opener should be guided along the incision, slanted in such a manner as to press down that side of the leather which is to be modeled into the background.

A few trials on scraps will illustrate the necessity in engraved leather of making the incisions perfectly vertical by showing how the excess of material gained by a slanted cut will refuse absolutely to be raised by either the opener or modeler. Vertical and slanting cuts are shown in Figure 3.

Figure 3.

a-Vertical cut

Vertical cut opened.

b-Slanting cut raised

for leaf edge.

By far the best color for an engraved line is that secured by the rubbing of the opener, but if the incision has been made so deep as to expose the inner substance of the leather in a light line it may be darkened with dye applied with a brush.

Tinting is used quite extensively to complete the decoration on engraved leather, and when the colors are well chosen and carefully blended there can be no question but that it is an acquisition.

MODELING AND EMBOSSING.

Modeling is the embellishment of leather with modeling tools (Figure 5). It may be accomplished in two ways: with

Figure 5. Modeling Tools

the outline of the design simply traced in with the stylus, or cut with an incising knife. The thick, close-grained leathers used for carving are also suitable for modeling, although thinner skins may be used if the design is traced than if it is incised, as cutting always weakens the leather. Calfskin is the most popular leather for modeling.

Flat modeling is a very simple process and consists in "laying down" the background surrounding a design by rubbing over its surface with the ball of the spoon-shaped modeler (Figure 6). The leather is kept moist during this process, and

Figure 6. Laying down the background

when it wrinkles under the pressure, as sometimes happens, the direction of the rubbing is changed. Under the combined influence of pressure and rubbing the leather grows gradually glossy and dark, until, when the work is done, it has taken on a depth and richness of color which is most pleasing.

Embossing or repoussé is a phase of modeling a little more difficult than flat work. It is the bas-relief of leather work, and achieves its best success in the hands of those who have a knowledge of clay and wax modeling.

The design is either traced or incised, and after the leather has been dampened the second time it is held in the left hand in such a position that the part to be raised is taut between the index finger and the thumb (Figure 7). A modeler with a ball-

1 Portiere of velvet sheepskin with applique border of the same reversed

2 Billiard table cover

3 Untrimmed sheepskin

4 Cedar chest covered with carved cowhide

5 Wooden clock case covered with carved and stained Russia calfskin

6 Pillow of sheep, goat or ooze calfskin

7 Twenty-four inch table mat of gray Russia calfskin

8 Gentleman's cuff case

9 Collar bag

10 Watchcase

13 Penwiper or needlebook

11 Shaving pad

12 Penwiper

14 Folding photograph frame representing the seasons

15 Photograph frame

16 Photograph frame

17 Photograph frame

19 Magazine cover

18 Memorandum pad

22 Bookcover

20 Magazine cover

21 College bookcover

23 Man's wallet

Figure 7. Embossing

shaped head is next rubbed backward and forward upon the back of the leather over the part to be thrown into relief. It is possible to make the relief quite high by redampening and much rubbing.

When the leather has been shifted in the hand until the whole design has been developed it is laid, flesh side down, upon the marble, again dampened, and any flat modeling or stamping necessary to enhance the beauty of the design applied.

If the design has been incised instead of traced the incisions are opened with the opener and their edges modeled into the background.

Good calfskin will preserve low relief without padding, but high relief requires support if the design is to retain its shape. Wax may be used for this padding, or a paste made as follows: Soak an ounce of dextrine in warm water over night; grate or shave to fine shreds a pint of scrap leather; stir it into the dissolved dextrine and add a few drops of turpentine or oil of cloves. This paste should be of the consistency of soft modeling wax. If it is too thick a little water is used to thin it, and if not thick enough the fault is remedied with more leather shavings. When large pieces of embossed leather, such as wall panels, chair backs and screens, are to be padded a mortar made of sifted sawdust, flour paste, fish glue and a few drops of turpentine is more practical than the dextrine paste.

Preparatory to padding, the embossed leather is turned face downward upon the marble. The hollows are then filled with wax or paste, which is pressed and molded into them until it adheres to the leather. When the hollows have been filled a sheet of paper is spread over the leather and a thin board laid on top of the paper. With the padding thus guarded against displacement, leather, paper and board are firmly grasped at their edges and turned right side up upon the marble and a fine modeling tool used to correct all faults resulting from the improper distribution of the padding. From one to three days is not too long for thorough drying, during which time the work should not be disturbed for fear of loosening the paste and distorting the design. A piece of cheese cloth is finally

pasted over the back of the leather to strengthen the padding in its position, when the work may be handled without danger to its decoration.

Modeling or embossing is rarely the sole ornament upon a piece of leather-work, either tinting, stamping, gilding, or all three being used in conjunction with it. This multiplication of processes is very interesting, and instead of detracting from the main process enhances it much as a suitable frame adds to a good picture.

STAMPING OR TOOLING.

Stamping is ornamentation with patterned tools. Its purest example is found in the work of the Mexicans, who have not only created and maintained the style of design peculiar to their work, but have reached a high efficiency in the making and handling of stamps. They use generally heavy calf or cow-skin, and manipulate it damp with cold tools and a hammer or mallet. They use no dyes or bronzes (Figure 8).

Figure 8. Stamps

The procedure for stamping is the usual one so far as the transfer of the design is concerned. The first step in the working is to outline the design with a small stamp held pattern-end down upon the dampened leather and struck lightly with a hammer. Care must be taken to keep the leather in a state of even dampness and to hammer with uniform force or the imprints made by the stamp will be of varying depth and color.

Opportunity for the exercise of creative ability comes when the outlining has been completed. In the best Mexican work we often find one design, either as a whole or in parts, repeated many times, but with such variety in the development that the effect is of different designs.

Early Flemish, Portuguese and Spanish leather show stamping with gold leaf, bronzes, and the lavish use of color. The best modern tooled leather is worked in imitation of these ancient styles.

A method of stamping, less familiar than those described, is done with stencil and press. It is used when a flat instead of a patterned design or background is desired, and while more or less mechanical in effect is useful when a saving in time is necessary or one design is to be duplicated a number of times.

The design is drawn upon heavy leather, cardboard or thin sheet metal and a stencil cut of either the design or its background. The leather to be decorated is dampened and the stencil laid in position upon it. Leather and stencil are then placed in a heavy press and weight screwed down. Time is given the leather to dry, when it is removed from the press and the stencil lifted. The deep, smooth imprint left by the stencil may be bronzed, painted or left plain, as the worker may wish.

A similar stamping process is that in which the design is etched or graved upon heavy sheet copper and the etched lines filled with ink thickened with gum arabic. The leather is slightly dampened, inverted upon the copper plate, and leather and plate put under heavy pressure. A colored design in low relief is the result of this treatment.

CUT-WORK.

Cut-work is leather in stencil, and is most effective when combined with another kind of leather or another material.

Simple designs, in which the parts to be cut out are well defined, produce better results than those having a great number of small irregular spaces. When articles which are to receive hard wear, such as handbags, belts, magazine and book covers, or card cases, are under consideration, this suggestion as to design will prove of practical as well as artistic value.

Smooth-finished leathers are good in combination with those having a suede finish, or leathers having the same kind of finish but of different colors. Silk, satin, vellum and tinted papers enter popularly into this work, especially in the making of articles in which the aim is semi-transparency. Lamp and candle shades come under this head.

At least two sharp, pointed knives are required for cut-work. They may be similar in shape, but of different sizes. A soft wood board is also needed. A good leather paste is made by bringing to a slow boil a half pound of flour in two quarts of water and adding to the mixture when cool an ounce of nitric acid, a dram of boric acid and a few drops of clove oil.

After pressing in the design with the stylus the leather is laid dry upon the soft wood board, its edges secured with thumb tacks and the spaces cut out. The paste is next brushed lightly upon the wrong side of the leather, inverted upon its lining of leather, silk or paper, and weighted down. When the paste has dried the weight is lifted, and any surplus that has oozed out in the pressing is carefully picked off with a sharp point.

An innovation in cut-work has been introduced recently in the use of Chinese embroideries. As these embroideries employ a wide range of color and much gold thread in even small designs they may be used as insets with almost jewel-like effects.

APPLIQUE.

Appliqué is another treatment of leather decoration which calls for the use of different leather or leather with fabrics or wood. The process is just what its name suggests—the applying of one material upon another by pasting, sewing, or riveting.

In leather the most effective work shows the combination of smooth and suede surfaces, or suede surfaces of different colors, and is the result of combining different kinds of leathers or the reverse sides of the same leather. For example, a Russia calfskin screen has its ornament of a conventional orange tree developed in ooze calfskin for the fruit, while the leaves, trunk and branches are of the modeled and stained Russia or of Morocco appliqué.

Good results are obtained also by contrasting the two surfaces of the same leather. A table cover of velvet sheep made suede side uppermost with a stencil border of the same, with the smooth side showing, illustrates this combination. Objects intended for use in offices, libraries, and halls are especially adapted to this treatment.

There is generally a difference in the style of ornament designed for appliqué on fabric and that on leather, the first being less formal and inclining to the naturalistic, the second severe and strictly conventional.

Two tracings are necessary in appliqué. One is made upon the material which is to serve as background and the other upon that out of which the ornament is to be cut. Sometimes only certain parts of the ornament, such as the petals of a flower or the leaves of a plant, are to be in appliqué, the remainder being developed by some other method, as staining, modeling or carving, if on leather, and needlework or painting if on fabric.

After tracing the ornament, either as a whole or in parts, it is cut out with knives as for cut-work, and pasted, sewn or riveted upon the duplicate tracing on the background. In the case of floral ornament a little embellishment with the pyrographic point and stains will give character to an otherwise flat appearance. In a pasted appliqué in geometric or severely conventional pattern a single line burnt close to the edges will define and strengthen the design, and a dark thread used in stitching will accomplish the same result for a sewn appliqué.

Rivets add such a decorative note to leather appliqué that a rivet-set and brass and copper rivets are a valuable acquisition for any leather worker. The setting of rivets is very simple. First, the pieces of leather to be riveted are laid together and

holes punched in the places to be filled by the rivets. The shank of the rivet is pushed through the holes and the rivet eye slipped over it. Next the small then the large hole in the rivet-set is fitted upon the shank, metal and leather are forced together, and the shank end flattened with a hammer. If an appearance of age is desired the rivets are oxidized with a weak solution of nitric acid. The acid should be applied before the rivets are set and in the open air, as the fumes are very injurious.

INLAY OR MOSAIC.

Because of its extreme difficulty few craftsmen are willing to undertake leather-mosaic, especially since it may be imitated to a certain degree of success and with much less labor by the use of stains.

Only thin leathers, such as Morocco and fine goatskin, are adapted to inlay and those designs which will be suitably developed in many colors. Two drafts are first made of the design—one on water color paper, the other on tracing paper. The first is painted to serve as a model for the mosaic, and the second is used to trace the design upon the background leather and the motifs for the insets.

Using very sharp knives, the motifs are cut out of the different colored leathers and their edges pared (Figures 9 and

Figure 9. Paring Knife

Figure 10. Paring

10). The corresponding spaces in the background are next cut out and the insets inserted in the spaces. The paring has left these bits of leather with slightly ragged edges, which in overlapping will facilitate the joining. If, before beginning the inlay, the background is pasted to a thin piece of muslin or linen, the task will be made much easier. When the work is finished a hot point run over the joinings will obliterate any unevenness. If this burnt line is gilded the brilliancy of the work will be greatly enhanced.

Another way of inlaying is to carve the outlines of the design upon the background leather and open them well with the opener. The bits of colored leather are cut and pared as in the first method, but this time they are pasted upon the leather in the corresponding spaces of the background and their edges sunken deep into the carved lines with a sharp modeler.

24 Tobacco pouch

25 Tobacco pouch

31 Change purse

26 Candle shade

27 Candle shade

28 Novelty candle shades

29 Music roll

32 Calendar

30 Match scratcher

Painted in oil: quantity limited - Price \$2.00
Order now

Pillow Cover; see descriptive matter

Leather belt - see descriptive matter

COLORING AND GILDING.

On account of the processes to which leather is subjected in tanning and dyeing the effect of coloring agents applied for decorative purposes varies. This is true alike of dyes and decolorants, and there is no rule or set of rules which will assure definite results. Experience is the only teacher, and even then it is safer to experiment upon scraps of leather before starting to color a large piece of work.

The durability of dyed leather is good if subjected to reasonable test. It is not proof against constant exposure to sunlight, gas light, artificial heat or bad ventilation. The use of potassium, potash, soda, and sulphate of iron, and any of the decolorants, such as sulphuric, nitric, oxalic or hydrochloric acid, are more or less destructive to leather, but used judiciously in weak solution and small quantities their influence is so minimized as not to be detrimental.

Upon tanned but not dyed leather potassium produces black; picric acid, yellow; sulphate of iron, slate color or gray; sulphate of iron over potash, dark red or green, according to the strength of the solution, and potash brown. Extreme care must be taken in the use of potassium and sulphate of iron and picric acid, as they are very injurious to health. A decolorant is used when it is desired to bleach the leather in certain portions of the design. Reagents of this kind are enumerated above. They are never to be used full strength. A good general proportion is one part of acid to five or six of water. In diluting, place the water in a measuring glass and add the acid drop by drop. Observance of this rule will avoid explosion.

Besides these coloring agents there are excellent aniline and vegetable dyes to be bought ready for use, and for the inexperienced they are to be recommended above those requiring skill in the handling.

In coloring large surfaces the leather must be dampened and the dye applied in even washes with soft wads made of cotton or old muslin. When the leather fails to respond satisfactorily to the first wash it should be left to dry, and then given a second wash of the same or different color, according to the end aimed at.

If the leather is to have a shaded appearance the color is allowed to sink into it more heavily in some places than in others. As the porosity varies in the same hide, this shading is sometimes secured by an even wash, and again it is necessary to take up the color in places with a sponge.

Stenciled leather requires the use of a stencil of oil board and a round, short-haired brush. The leather is smoothed flat upon a board and the stencil held upon it by weights. The brush is dipped into the dye and wiped nearly dry against the side of the vessel holding the color. Held short, it is rubbed vigorously upon the leather in the spaces of the stencil until the color has been transferred. If the edges of the stencil are held close to the leather and the amount of color in the brush is scant there will be no danger of blurring. After the stencil is lifted the spaces of the design may be dyed a contrasting color or tinted with good effect.

Color work on such smooth leather as Russia calf and cow-skin has its beauty greatly enhanced by rubbing. This may be done with the bare hand or a chamois rubber and with or without the use of wax. When a very brilliant gloss is desired the work is thinly varnished.

All suede leathers respond to staining, and as a medium for the expression of harmony of color cannot be rivalled.

Gilding requires skill in the use of a new equipment composed of a stuffed deerskin pad, gilder's knife, brush, stamps and wheels and a book of gold or silver leaf.

Preparatory to gilding a size is made by beating lightly the white of an egg and allowing it to stand for twenty-four hours, when the fluid which has separated from the rest of the egg is poured off and set aside for use.

The leather is laid upon a flat surface, and the parts to be gilded given a thin coat of the egg size and left to partially dry. A sheet of gold leaf is laid upon the pad and, using the knife to manipulate it, is transferred in approximately suitable pieces to the leather, where it is pressed down lightly upon the size with the gilder's brush. The tool or wheel, which has been heating, is now tested, rubbed over a slightly oiled cloth, and then pressed firmly upon the gold leaf. The tool must not be hot enough to hiss when touched with the moistened finger. When the tool is lifted it will leave its imprint patterned in gold upon the leather. Any surplus gold leaf may be easily removed by blowing or with a cotton wad. Successful gilding can be done only where there is no draft, as the gold leaf is exceedingly thin and is easily blown about.

Sometimes gold and bronze powder are used instead of gold leaf, and instead of the egg size a resin powder which melts under the heat of the tool. With the exception of the sprinkling on of the powder the procedure is the same as for gold leaf.

ILLUSTRATIONS.

1. Russia calfskin table cover, stamped and modeled.
2. Handbag of Russia calfskin, carved and stamped.
3. Belt and bag of modeled calfskin.
4. Costume bags, burnt and stained.
5. Tablescarf of velvet sheepskin, decorated with pyrography and fancy lacing.
6. Goatskin workbag with semi-conventional lilies, burnt.
7. Calfskin medicine case, decorated with pyrography.
8. Russia calfskin workbag, carved, modeled and stamped.
9. Calfskin card case, incised and stamped.
10. Carved cowhide and umbrella stand.
11. Portfolio of tan Russia, carved and embossed.
12. Modeled and embossed calfskin bookcover.
13. Mirror frame of sumach calfskin, modeled, embossed and tinted.
14. Address book of sumach calfskin, modeled and stained.
15. Memorandum pad of sumach calfskin, modeled and stained.
16. Waste basket of stiff cowhide, engraved and laced.
17. Belt of sumach calfskin, engraved and stained.
18. Handbag of engraved and stained calfskin.
19. Russia calfskin bill-fold, modeled and stamped.
20. Stamped calfskin fob.
21. Stamped calfskin belt.
22. Gray horsehide head-rest with cut-work decoration developed with burning and staining.
23. Goatskin belt, showing Dresden insets.
24. Linen belt and bag with sheepskin appliqué.
25. Portieres of arras or monks' cloth, with appliqué of dogwood in sheepskin. Grill, bands, holders and tassels of the same leather.
26. Hatrack, showing appliqué of carved cowhide upon wood.
27. Chair seat and back of carved, gilded and stamped cowhide.
28. Calfskin screen, modeled and stained.

PATTERNS.

1. Portiere of velvet sheepskin, with appliqué border of the same reversed. Leather required, 8 skins. Pattern \$1.00.
2. Billiard table cover of burlap, with appliqué of sheepskin. Leather required, 7 skins. Pattern 50c.
3. Untrimmed sheepskin, burnt and colored. Leather required, 1 skin. Pattern \$1.00.
4. Cedar chest, covered with carved cowhide. Leather required for chest, 45x18x22 inches, 3 half hides. Pattern \$1.00.
5. Wooden clock case, covered with carved and stained Russia calfskin, 7x12x3½ inches. Leather required, 24x27 inches. Pattern 50c.
6. Pillow of sheep, goat or ooze calfskin, burnt and stained. 22x22 inches. Leather required, 2 skins. Pattern 50c.
7. Twenty-four inch table mat of gray Russia calfskin, incised and stained, or of sheepskin burnt and stained. Leather required, 1 skin. Pattern, 50c.
8. Gentlemen's cuff case of ooze calf, goat or sheepskin, burnt and stained. Leather required, 14x15 inches. Pattern 20c.
9. Collar bag of tooled cowhide and silk. Leather required, 12x24 inches. Pattern 20c.
10. Watchcase of sheepskin, burnt. Leather required, 6x12 inches. Pattern, 15c.
11. Shaving pad of ooze calf, sheep or goatskin, burnt and stained. Tissue paper filler. Leather required, 6x6 inches. Pattern 15c.
12. Penwiper of horsehide, sheep, goat or ooze calfskin, burnt and stained. Chamois filler. Leather required, 5x9 inches. Pattern 15c.
13. Penwiper or needlebook of kid, calf, sheep or goatskin, burnt and stained. Chamois filler for penwiper; white flannel for needlebook. Leather required, 5x7 inches. Pattern 15c.
14. Folding photograph frame representing the seasons, made of horse, sheep, goat or kid calfskin, burnt, stained and laced. Leather required, 15x24 inches. Pattern 50c.
15. Photograph frame of horse, sheep or ooze calfskin, burnt and stained, or of Russia calfskin, embossed. Leather required, 9x12 inches. Pattern, 25c.
16. Photograph frame of Russia calfskin, modeled and stamped, or sheepskin, burnt. Leather required, 9x12 inches. Pattern 25c.
17. Photograph frame of kid, calf, horse, ooze calf or goatskin, burnt and stained. Leather required, 8x9 inches. Pattern, 25c.
18. Memorandum pad of sheep or goatskin, burnt stained and stitched. Leather required, 4½x15 inches. Pattern, 15c.
19. Magazine cover of sheep, goat or ooze calfskin, with appliqué of same leather reversed, burnt, stained and laced. Leather required, 12x24 inches. Pattern, 25c.
20. Magazine cover of Russia calf or split cowskin, modeled, stained and stitched. Leather required, 12x24 inches. Pattern, 25c.
21. College bookcover of natural sheepskin, colored pennant in appliqué, lettering and seal burnt. Pattern 25c.
22. Bookcover of sumach calfskin, modeled, embossed and stained. Leather required, 10x15 inches. Pattern 25c.
23. Man's wallet of modeled Russia calfskin, lined with skiver. Leather required, 9x15 inches. Pattern 15c.
24. Tobacco pouch of sheep, goat or grain calfskin and silk, with

- rubber lining, burnt. Leather required, 5x8 inches. Pattern 15c.
25. Tobacco pouch of sheep, goat or grain calfskin, with rubber lining, burnt and stained. Leather required, 7x12 inches. Pattern 15c.
 26. Candleshade in cut-work of sheep or goatskin, over painted water color paper. Leather required, 7x12 inches. Pattern 20c.
 27. Candleshade with laced panels in cut-work made of thin sheep or goatskin, lined with tinted silk. Leather required, 7x15 inches. Pattern 20c.
 28. Novelty candleshades of sheepskin in cut-work. Leather required for one, 7x12 inches. Pattern 25c. for the four.
 29. Music roll of ooze cowhide, burnt and stained, lined with skiver. Leather required, 15x18 inches. Pattern 25c.
 30. Match-scraper of sheep or goatskin, burnt. Sandpaper scratcher. Leather required, 6x6 inches. Pattern 15c.
 31. Change purse of stamped cowhide. Leather required, 6x7 inches. Pattern 15c.
 32. Calendar of kid calf, sheep or goatskin, burnt and stained. Leather required, 6x6 inches. Pattern 15c.

HOW TO MAKE A PILLOW COVER

An Indian head pillow adds the finishing touch to the furnishing of office, den or library. The making is an hour's delightful pastime if these directions are followed.

From a decorated skin and a plain skin cut corresponding squares of twenty to twenty-four inches. Place these squares right faces together and stitch three sides on the machine. With a conductor's round punch pierce the four sides with holes $\frac{1}{2}$ inch apart and $\frac{3}{8}$ of an inch inside the stitching. Long leather thongs $\frac{1}{4}$ inch wide have been cut. Turn the pillow cover, straighten the seam, then lace over and over the three stitched edges with the thong. After the pillow has been forced inside this covering, slip-stitch then lace the fourth side.

Velveteen or heavy satin may be used for the back of these pillows, but they do not admit of the laced edge, which is so effective.

See illustration for design and price of leather

LEATHER BELTS

How to make them at home at very small cost. Any one that can run a sewing machine or use a needle can make a dozen belts in a day.

Every woman needs belts, many of them, and will be glad that it is now possible for her to indulge in these dainty accessories at the expense of very little time and money.

From six to eight belts may be made from one sheepskin at a cost of only \$1.75, or about 20 cents each.

For a waist measure 22 to 25 inches cut a strip of leather 4 by 30 inches and slant one end. Turn the two long and the slanted edges into the depth of $\frac{3}{4}$ of an inch and stitch twice. The second run of stitching is $\frac{1}{4}$ of an inch inside the first. Punch and work three eyelets in the slanted end, placing the first three inches, the second $4\frac{1}{2}$, the third 6 inches from the end.

Through a hole two inches from the straight end push the prong of a brass or nickel harness buckle. These cost from five to twenty cents each. Turn back the short end and stitch. Cut a second piece of leather $4\frac{1}{2}$ by $1\frac{1}{2}$ inches, turn in the long edges until the band is $\frac{1}{2}$ inch wide, stitch and secure over the stitching which holds the buckle in place.

A crush belt is made by turning in $\frac{1}{4}$ instead of $\frac{3}{4}$ -inch hem, and a stiff belt by forcing the long edges to meet in the center.

The left-over pieces of this leather can be used for making collars and cuffs for coat or for dress trimmings.

See illustration

All patterns mentioned in this book and at indicated prices, also special patterns and designs, may be obtained at reasonable prices from

WINIFRED WILSON,
65 West 104th Street, New York City.

The reader must not infer that small pieces of the different skins can be bought cut to order, as this is not the case. Ooze Sheep, Ooze Goat, Ooze Calf and Morocco Skins are sold in the whole skins only. Russia and Calf, whole skins and half skins. Horsehide, Cowhide and Ooze Cow, in the half hide or side.

M. B. WILLCOX,
180 William Street, New York City.

Special attention is called to the fact that all leathers are not suitable for this work. The author highly recommends the Art Leathers manufactured by

M. B. WILLCOX,
180 William Street, New York City,
The only manufacturer in the world who confines his business strictly to Art Leathers.

SMITHSONIAN INSTITUTION LIBRARIES

3 9088 00339381 6

chm NK6200.W5X
Leather work,